

Amendments to the Specification:

*Please replace the paragraph beginning at page 3, line 1 as amended on 6/12/06 with the following amended paragraph:*

In another aspect of the invention, a method for developing a trajectory plan for use with a vehicle that includes a vehicle suspension system that includes a trajectory planning system for developing a trajectory plan, and a controllable suspension element for urging a point on the vehicle to follow the trajectory plan, includes recording a profile that includes data points, the data points representing positive and negative vertical deflections of a travel path; smoothing data of the profile, the smoothing providing positive and negative values; and recording the smoothed data as the trajectory plan.

*Please replace the paragraph beginning at page 4, line 1 with the following amended paragraph:*

In another aspect of the invention, a method for developing a trajectory plan for use by a vehicle including a payload compartment, a wheel, a plurality of sensors for measuring a corresponding plurality of states of the vehicle, and a controllable suspension element for exerting force between the wheel and the payload compartment, includes recording a profile includes including data points measured by the sensors, the data points representing positive and negative vertical values; and storing the profile as one of a series of commands causing the controllable suspension element to exert a force, and a series of states of the vehicle as measured by at least one of the sensors.

*Please replace the paragraph beginning at page 4, line 17 with the following amended paragraph:*

In another aspect of the invention, a method is disclosed for operating a vehicle including a payload compartment and a front surface engaging device and a rear surface engaging device, the vehicle further including a suspension system, the suspension system including a front controllable suspension element for exerting a force between the front surface engaging device and the payload compartment to modify the distance between the front surface engaging device and the payload compartment, the front controllable suspension element having a centered position, the front controllable suspension element including a centering subsystem for urging

the front controllable suspension element toward the centered position, the suspension system further including a rear controllable suspension element for exerting a force between the rear surface engaging device and the payload compartment to modify the distance between the rear surface engaging device and the payload compartment, the rear controllable suspension element having a centered position, the rear controllable suspension element including a controllable centering subsystem for urging the rear controllable suspension element toward the centered position, includes operating the vehicle on a road segment including disturbances so that the front surface engaging device encounters the disturbances before the rear surface engaging device and so that the front controllable suspension element exerts forces responsive to the disturbances; determining the amplitude of one of the road disturbances, responsive to a determining that the amplitude of the one of the disturbances is less than a first threshold amount, disabling the rear suspension element centering subsystem.

*Please replace the paragraph beginning at page 5, line 21 with the following amended paragraph:*

In another aspect of the invention, a method is disclosed for operating a vehicle including a payload compartment and a first surface engaging device and a second surface engaging device, the vehicle further including a suspension system, the suspension system including a first controllable suspension element for exerting a force between the first surface engaging device and the payload compartment to modify the distance between the first surface engaging device and the payload compartment, the suspension system further including a second controllable suspension element for exerting a force between the second surface engaging device and the payload compartment to modify the distance between the second surface engaging device and the payload compartment, each of the first controllable suspension element and the second suspension element including associated sensors to measure at least one of vertical acceleration, vertical velocity, vertical road deflection, suspension displacement, and force applied by the controllable suspension includes operating the vehicle on a road segment having disturbances so that the first surface engaging device encounters the disturbances before the second surface engaging device; measuring, by the sensors associated with the first controllable suspension element, the disturbances; based on the measuring, causing the second controllable suspension

element to exert a force related to the disturbance before the second surface engaging device encounters the disturbance.

*Please replace the paragraph beginning at page 6, line 7 as amended on 6/12/06 with the following amended paragraph:*

In another aspect of the invention, a method is disclosed for operating a vehicle including a payload compartment and a first surface engaging device and a second surface engaging device, the vehicle further including a suspension system, the suspension system including a first controllable suspension element for exerting a force between the first surface engaging device and the payload compartment to modify the distance between the first surface engaging device and the payload compartment, the suspension system further including a second controllable suspension element for exerting a force between the second surface engaging device and the payload compartment to modify the distance between the second surface engaging device and the payload compartment, each of the first controllable suspension element and the second suspension element including associated sensors to measure at least one of vertical acceleration, vertical velocity, vertical road deflection, suspension displacement, and force applied by the controllable suspension, includes operating the vehicle on a road segment having disturbances so that the first surface engaging device encounters the disturbances before the second surface engaging device; measuring, by the sensors associated with the first controllable suspension element, the disturbances; and based on the measuring, causing the second controllable suspension element to exert a force related to the disturbance before the second surface engaging device encounters the disturbance.

*Please insert the following new paragraph after the paragraph beginning at page 7, line 14 and before the paragraph beginning at page 7, line 16:*

FIG. 2c is a partially block diagram, partially diagrammatic representation of a controllable suspension;

*Please replace the paragraph beginning at page 11, line 4 with the following amended paragraph:*

A trajectory plan is a pre-determined path in space of a point or set of points on the payload compartment. To control the pitch of the vehicle, the trajectory may represent at least

two points, respectively forward and rearward [[in]] on the payload compartment. To control the roll of the vehicle, the trajectory plan may represent at least two points, one on each side of the vehicle. In a four wheeled vehicle, it may be convenient to use for trajectory plan development four points [[in]] on the payload compartment, one near each wheel. Pairs of the points could be averaged (such as averaging the two points on each side of the vehicle to consider roll in the development of the trajectory plan, or averaging the two points in the front and the rear, respectively, to consider pitch in the development of the trajectory plan). For simplicity of explanation, the invention will be described in terms of a single point. The microprocessor issues control signals to controllable suspension element 18 to cause the vehicle to follow the trajectory plan. More detail on trajectory plans and the execution of trajectory plans are set forth in the examples that follow.

*Please replace the paragraph beginning at page 12, line 9 with the following amended paragraph:*

Another embodiment of the invention, shown in FIG. 2c, includes both the profile storage device of FIG. 2a and the trajectory plan storage device of FIG. 2b. In an embodiment including both profile storage device 22 and trajectory plan storage device 25, the storage devices may be separate devices or may be different portions of a single memory device. Operation of embodiments including trajectory plan storage device 25 are described further in the discussion of FIG. 6c.

*Please replace the paragraph beginning at page 15, line 16 as amended on 6/12/06 with the following amended paragraph:*

If it is determined at step [[58]] 157 that there is no previously stored road profile that matches the road profile information collected in step 55, at step 64 controllable suspension element 18 acts in a reactionary mode.